

Attachment 1: Antimicrobial Resistance  
Section 2

## **HEALTHCARE-ASSOCIATED INFECTIONS AND ANTIMICROBIAL RESISTANCE**

**A. Personnel - \$55,000**

Health Educator/Epidemiologist (1 FTE, 12 months) (Vacant) \$55,000

Funding is requested for a FTE Health Educator/Epidemiologist to oversee the development and implementation of the collaboration project for long-term care facilities.

**B. Fringe Benefits - \$14,288**

The fringe benefit rate is 25.81% of salaries and wages for the above-listed positions, plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

**C. Travel - \$2,878**

In State - \$1,575. In-state travel is requested for travel to required for work group meetings, formative evaluation sessions, and training of health care workers. Staff to travel approximately 3,500 miles x 0.45/mile = \$1,575.

Out of State - \$1,303.

Travel, food and lodging are requested for one person to attend the mandatory national conference in Atlanta.

1 trip x 1 epidemiologist x \$500 r/t airfare	\$500
Registration x 1 epidemiologists x \$150	\$150
3 nights and lodging by 1 epidemiologist x \$150/night	\$450
Ground transportation x 1 epidemiologist	\$150
3 days per diem x 1 epidemiologist x \$17.50/day	\$53

**D. Equipment - \$0**

**E. Supplies - \$2,500**

General Office Supplies - \$2,500

Funding is requested for the purchase of general office supplies: paper, postage, folders, envelopes, etc. to implement the project.

**F. Contractual - \$50,000**

Part-time statistician to assist with the analysis of data collected through NHSN first from acute care hospitals and then from long-term care facilities as they are incorporated in to the project.

*Name of Contractor:* Contractor will be chosen from a list of contractors that provide data analysis services. The list of contractors is compiled by the Massachusetts Operational Service Center after an extensive competitive

procurement, background checks and establishment of quality, and pricing agreements

*Method of Selection:* This contract was competitively procured in accordance with Massachusetts Law, 801 CMR 21.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* contractor is analysis data collection and report on same.

*Method of Accountability:* The contractor will report to the Antibiotics Resistance Project Coordinator

*Budget:* \$50,000 (27 hrs week/\$35 hr.)

**G. Construction - \$0**

**H. Other - \$13,098**

Information Technology Support charge back: \$1,098. A cost assessment has been determined for support of computer equipment/rental/internet access/ software support and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

Printing - \$9,000

Funding is requested for the printing and assembly of education and training materials for the implementation of three (3) regional ½-day training seminars. 300 persons x \$30 ea.

Training Support \$3,000 – Funding is requested for support for 3 training seminar. Support includes rental space and conference incidentals. 3 conferences x \$1,000 ea.

**I. Total Direct Costs – 137,764**

**J. Indirect Costs – \$8,360**

**Total: HEALTHCARE-ASSOCIATED INFECTIONS AND ANTIMICROBIAL RESISTANCE \$146,124**

Attachment 2: Foodborne Disease

**Section:1 ENHANCE CAPACITY FOR INVESTIGATION, CONTROL AND  
REPORTING OF FOODBORNE DISEASE OUTBREAKS**

Subsection: 2

**OutbreakNet: PERSONNEL AND TRAINING**

**A. Personnel - \$52,630**

Foodborne Epidemiologist (1.0 FTE, 12 months) (Harris) \$52,630  
Ms. Harris is assigned to the Food Protection Program and works closely with the Working Group on Foodborne Illness Control. Ms. Harris oversees the implementation of the Foodborne Illness Investigation training program and the trainings related to risk-based inspections, working closely with local boards of health to improve their reporting and investigation of foodborne illness outbreaks and responsible for updating the Department's web site with pertinent foodborne illness information.

**B. Fringe Benefits - \$13,676**

Fringe benefits applicable to direct salaries and wages are treated as direct costs. The fringe benefit rate is 25.81% plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

**C. Travel - \$3,185**

In State - \$1,670

Funding is requested to travel to local health departments, foodborne illness trainings, and foodborne illness investigations throughout Massachusetts: 3,500 miles at \$.45/mile = \$1,575

Conference: Annual Massachusetts Health Officers Association Conference in Hyannis, MA (1 x person registration fee: \$95.00)

Out of State - \$1,515

Outbreaknet Meeting Buffalo, NY - June 2009

CDC Sponsored Meeting \$1,515

Airfare 1 Epidemiologist x r/t airfare \$350

Conference fee \$395

4 nights lodging x 1 person/\$150/night \$600

Ground transportation costs \$100

4 day per diem 1 person x \$17.50/day \$70

**D. Equipment - \$0**

**E. Supplies - \$2,500**

General Office Supplies - \$2,500

Funding is requested for the purchase of general office supplies: paper, postage, folders, envelopes, etc.

**F. Contractual - \$0**

**G. Construction - \$0**

**H. Other - \$2,298**

Information Technology Support charge back: \$1,098 – A cost assessment has been determined for support of computer equipment/rental/internet access/software support and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

Printing - \$1,200

Funding is requested for the printing and binding of training materials for six Foodborne Illness Investigation courses for approximately 100 participants (100 manuals x \$12.00/each).

**I. Total Direct Cost - \$74,289**

**J. Indirect Costs - \$8,000**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages

**TOTAL: OutbreakNet PERSONNEL and TRAINING - \$82,289**

Attachment 2: Foodborne Disease

**Section:1 ENHANCE CAPACITY FOR INVESTIGATION, CONTROL AND  
REPORTING OF FOODBORNE DISEASE OUTBREAKS**

Subsection: 3

**OutbreakNet - COLLECTION AND TRANSPORT**

**A. Personnel - \$0**

**B. Fringe Benefits - \$0**

**C. Travel - \$0**

**D. Equipment - \$0**

**E. Supplies - \$4,720**

Specimen Collection Materials	\$1,200
Collection containers, mailing tubes, inserts	
Specimen Collection Training Materials	\$2,520
Binders, dividers, stick-it pads, highlighters, laminating pouches	
Specimen Collection Educational Materials	\$1,000
Posters including packaging and shipping	

**F. Contractual - \$4,560**

Funding is requested for the collection and transport of specimens.

*Name of Contractor: Depending on location of specimen one of these 5 contractors will be utilized:*

Federal Express, Greenbelt MD  
USA Couriers, Boston MA  
Millers Express, No. Easton MA  
Advantage Delivery Services, Rockland, MA  
City Express, Boston MA

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractors listed above have been awarded a Master Service Agreement and will be utilized for collection and transport of specimens.

*Period of Performance:* January 1, 2009 –December 31, 2009 (one year)

*Scope of work:* The contractor will pick up specimens from hospital or laboratories and deliver to the State Laboratory in a timely manner.

*Method of Accountability:* The laboratory supervisor will oversee the contractor.

*Budget:* \$4,560

Flat rate round trip to Berkshires (Western MA): \$284

Flat rate round trip to Worcester (Central MA): \$95  
Average: \$190 per trip - 12 outbreaks x 2 trips per outbreak x \$190 per trip = \$4,560

**G. Construction - \$0**

**H. Other - \$720**

Postage – \$720

Funding is requested overnight mail services to ensure timely delivery of collection kits and samples. (10 lb package shipped by overnight mail = \$15.00 each way = \$30.00 for each mail-out/mail-in service 12 outbreaks x 2 mail-out/mail-in services per outbreaks x \$30 per service = \$720.00)

**I. Total Direct Cost - \$10,000**

**J. Indirect Costs \$0**

**TOTAL – OutbreakNet: FOODBORNE DISEASE COLLECTION AND TRANSPORT - \$10,000**

Attachment 2: Foodborne Disease

**Section 2: IMPROVE LABORATORY-BASED SURVEILLANCE FOR  
EMERGING FOODBORNE PATHOGENS**

Subsection: A

**PULSENET LABORATORY**

**A. Personnel - \$51,067**

PFGE Bacteriologist II (1.0 FTE, 12 months) (Sennott) \$51,067

Ms. Sennott will perform functions performed in our PFGE Laboratory as described in the reapplication. Ms. Sennott coordinates PFGE activities, including PFGE analysis and maintenance of PFGE databases.

**B. Fringe Benefits - \$13,272**

Fringe benefits applicable to direct salaries and wages are treated as direct costs.

The fringe benefit rate is 25.81% Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

**C. Travel - \$2,490**

Out of state travel - \$2,490

Funding is requested for 1 laboratory and 1 epidemiology staff member to travel to the Annual PulseNet meeting in Snowbird UT, 2009.

Airfare \$500 x 2	\$1,000
Registration \$150 x 2	\$300
Hotel \$150 x 3 nights x 2	\$900
Meals 4 day x 17.50 x 2 persons	\$140
Ground transportation x 2	\$150

**D. Equipment - \$0**

**E. Supplies - \$53,500**

Lab supplies - \$52,500

Funding is requested to perform 2300 tests, including restriction enzymes \$22,000, agarose \$4,500, media \$3,500, reagents \$4,500, tubes \$4,000, disposables \$10,000 (tips, swabs, loops needles etc); gel supplies \$1,000; reference books and materials \$500; misc. supplies \$2,500

General Office Supplies - \$1,000 Funding is requested for the office supplies necessary to the running of the PFGE Lab including paper, ink, permanent markers, binders, disks, pens, etc.

**F. Contractual - \$5,000**

Annual maintenance for 5 CHEF PFGE mappers – equipment used daily for Pulse Net activities.

*Name of contractor:* Bio-Rad Corporation, Hercules, CA

*Method of selection:* The purchase of the PFGE laboratory equipment was competitively procured in previous cooperative agreement years.

The manufacture of this DNA fingerprinting equipment is the only source of maintenance.

*Period of performance:* January 1, 2009 – December 31, 2009 (one year).

*Scope of Work:* Inspection of equipment, determine failure, repair

*Method of Accountability:* Contractor will work at the direction of the laboratory supervisor

*Budget:* \$5,000 (5 machines @ \$1,000 ea.)

**G. Construction - \$0**

**H. Other - \$1,098**

Information Technology Support charge back: \$1,098 – A cost assessment has been determined for support of computer equipment/rental/internet access/software and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

**I. Total Direct Cost - \$126,427**

**J. Indirect Costs - \$7,762**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages

**TOTAL: PULSENET LABORATORY - \$134,190**

Attachment 2: Foodborne Disease

**Section 2: IMPROVE LABORATORY-BASED SURVEILLANCE FOR  
EMERGING FOODBORNE PATHOGENS**

Subsection: A.1

**PULSENET AREA LABORATORY**

**A. Personnel - \$50,796**

PFGE Bacteriologist III (1.0 FTE, 12 months) (Watarida)	\$50,796
Ms. Watarida supervises all functions performed in PFGE lab as described in application. Coordinates susceptibility testing of relevant PFGE isolates.	

**B. Fringe Benefits - \$13,202**

Fringe benefits applicable to direct salaries and wages are treated as direct costs. The fringe benefit rate is 25.81% salaries and wages for the above-listed positions plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

**C. Travel - \$2,915**

Area Lab Site Visits \$1,640	
Approximately 2000 miles x \$0.45/mile	\$900
4 nights lodging x 1 person x \$150 night	\$600
Meals x 8 days x 1 person x \$17.50/day	\$140

Regional PulseNet meeting \$1,275

Funding is requested for 2 laboratory staff and 1 epidemiology staff to travel to the 2009 Annual Regional PulseNet meeting.

Hotel \$150 x 2 nights x 3	\$900
Meals x 2 days x 17.50/day x 3 persons	\$105
Approximately 200 miles x \$0.45/mile x 3	\$270

**D. Equipment - \$0**

**E. Supplies - \$17,750**

Lab supplies: \$16,250

Funds are requested to perform PFGE for ongoing and expanded activities as described above, as well as to provide supplies as needed to all labs within the Northeast Region., including restriction enzymes \$5,000, agarose \$1,500, media \$1,000, reagents \$750, disposables \$2,000, gel supplies \$1,000; misc. other supplies as needed \$5,000.

Office Supplies: \$1,500

Funding is requested for general office supplies.

**F. Contractual - \$0**

**G. Construction - \$0**

**H. Other - \$25,196**

IT support \$2,196

Funding is requested for Information Technology chargeback for personnel (a)computer (Watarida) and (b) laptop computer used in making area site visits. Information Technology Support charge back: – A cost assessment of \$1,098 has been determined for support of computer equipment/rental/internet access/software and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

Software- \$23,000

Funding is requested for an additional 2-user BioNumerics license that would allow for completion of several data mining projects (currently planned for the Northeast Region) without interfering with routine PFGE lab work.

**I. Total Direct Cost - \$109,859**

**J. Indirect Costs - \$7,721**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages.

**TOTAL - PULSENET AREA LABORATORY - \$117,580**

Attachment 2: Foodborne Disease

**Section 2: IMPROVE LABORATORY-BASED SURVEILLANCE FOR  
EMERGING FOODBORNE PATHOGENS**

Subsection: B

**SURVEILLANCE OF SHIGA TOXIN-PRODUCING E. coli**

**A. Personnel - \$0**

**B. Fringe Benefits - \$0**

**C. Travel - \$0**

**D. Equipment \$0**

**E. Supplies - \$15,500**

Laboratory Supplies: Shiga toxin EIA kits \$8000 RIM latex test kits \$3,000; Primers and probes for PCR identification of Stx 1 and Stx 2 \$2,000; Triple layer packaging materials for delivery of Shiga-toxin producing E. coli (a Category A infectious substance) from clinical laboratories to State Laboratory \$2,500.

**F. Contractual - \$5,000**

Funds for delivery of Shiga-toxin producing E. coli (a Category A infectious substance) from clinical laboratories to MA State Laboratory by Category A courier \$5000.

*Name of Contractor: Depending on location of specimen one of these 5 contractors will be utilized:*

Federal Express, Greenbelt MD  
USA Couriers, Boston MA  
Millers Express, No. Easton MA  
Advantage Delivery Services, Rockland, MA  
City Express, Boston MA

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractors listed above have been awarded a Master Service Agreement and will be utilized for collection and transport of specimens.

*Period of Performance:* January 1, 2009 –December 31, 2009 (one year)

*Scope of work:* The contractor will pick up specimens from hospital or laboratories and deliver to the State Laboratory in a timely manner.

*Method of Accountability:* The laboratory supervisor will oversee the contractor.

*Budget:* \$5,000

**G. Construction - \$0**

**H. Other - \$0**

**I. Total Direct Cost - \$20,500**

**J. Indirect Costs - \$0**

**TOTAL SURVEILLANCE OF SHIGA TOXIN-PRODUCING E. coli \$20,500**

Attachment 2: Foodborne Disease

**Section 2: IMPROVE LABORATORY-BASED SURVEILLANCE FOR  
EMERGING FOODBORNE PATHOGENS**

Subsection: E

**NARMS**

**A. Personnel - \$0**

**B. Fringe Benefits - \$0**

**C. Travel - \$0**

**D. Equipment - \$0**

**E. Supplies – \$6,500**

Antisera for identification of *Salmonella* species, *Shigella* species, and *E. coli* O157:H7 \$2,500, Selective media \$1,300; Miscellaneous shipping supplies (parafilm, tape, labeling stickers) \$1,700; Triple layer packaging materials for quarterly shipment of Shiga-toxin producing *E. coli* (a Category A infectious substance) from State Laboratory to CDC \$1,000.

**F. Contractual - \$1,500**

Funds for delivery of Shiga-toxin producing *E. coli* (a Category A infectious substance) from MA State Laboratory to CDC by Category A courier \$1,500.

*Name of Contractor: Depending on location of specimen one of these 5 contractors will be utilized:*

Federal Express, Greenbelt MD

USA Couriers, Boston MA

Millers Express, No. Easton MA

Advantage Delivery Services, Rockland, MA

City Express, Boston MA

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractors listed above have been awarded a Master Service Agreement and will be utilized for collection and transport of specimens.

*Period of Performance:* January 1, 2009 –December 31, 2009 (one year)

*Scope of work:* The contractor will pick up specimens from hospital or laboratories and deliver to the State Laboratory in a timely manner.

*Method of Accountability:* The laboratory supervisor will oversee the contractor.

*Budget:* \$1,500

**G. Construction - \$0**

**H. Other - \$0**

**I. Total Direct Cost - \$8,000**

**J. Indirect Costs - \$0**

**TOTAL NARMS \$8,000**

Attachment 3: **Lyme Disease**

**Lyme Disease**

- A. Personnel - \$0**
- B. Fringe Benefits - \$0**
- C. Travel - \$0**
- D. Equipment - \$0**
- E. Supplies - \$0**
- F. Contractual - \$20,000**

Funding is requested for data entry personnel needed to enhance existing surveillance capacity and surveillance system. Our surveillance system receives over 10,000 reports per year.

*Name of Contractor:* to be determined

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractor will be chosen from this list.

*Period of Performance:* January 1, 2009 – December 31, 2009 (one year)

*Scope of work:* The vendor will provide data entry personnel who will accurately input data received.

*Method of Accountability:* The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables. The Public Health Veterinarian will work closely with the contractor to ensure receipt of deliverables and that timelines are kept.

*Budget:* \$15,000 .5FTE data entry persons @ \$19 per hour (contracted rate) for 50 weeks.

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Funding is requested for a contractor to obtain and analyze data on Lyme disease laboratory testing practices among laboratories serving Massachusetts.

*Name of Contractor:* to be determined

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractor will be chosen from this list.

*Period of Performance:* January 1, 2009 – December 31, 2009 (one year)

*Scope of work:* The vendor will obtain and analysis Lyme disease testing practices

*Method of Accountability:* The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables. The Public Health Veterinarian will work closely with the contractor to ensure receipt of deliverables and that timelines are kept.

*Budget:* \$5,000

**G. Construction - \$0**

**H. Other - \$20,000**

Funding is requested for printing and distribution of the “Lyme Disease Physicians Manual” a reference guide for physicians offices. \$20,000

**I. Total Direct Cost - \$40,000**

**J. Indirect Costs - \$0**

**Total: Lyme Disease - \$40,000**

## **Influenza Surveillance and Response**

### **A. Personnel - \$138,733**

Influenza Surveillance Epidemiologist (1.0 FTE, 12months)(Corkren) \$67,483

Mr. Corkren oversees and coordinates all aspects of the Enhanced Influenza Surveillance and Response project in Massachusetts. He serves as the primary liaison to the MA SLI Virus Isolation Laboratory, other laboratories performing viral isolation, sentinel surveillance sites, Children's Hospital Automated Epidemiologic Geotemporal Integrated Surveillance System (AEGIS) for syndromic surveillance, and other state influenza coordinators. He also serves as the primary liaison to all sentinel sites, and the CDC on all issues relating to influenza surveillance. Mr. Corkren is also responsible for coordinating all data collection, database development and management, analysis and report writing, as well as the epidemiologic investigations of unusual cases, clusters or outbreaks or influenza. He receives direct supervision from the Immunization Program Epidemiology Coordinator, with input from that program's Medical Director.

Bacteriologist II (virologist) (1.0 FTE, 12 months) (Vacant) \$71,250

To enhance the laboratory testing capacity for seasonal influenza, this intermediate bench-level virologist would perform specimen processing and all testing related to conventional influenza diagnostics. These tests include viral isolation by cell culture followed by subtyping (antigenic characterization). Additional testing would be performed by this individual to differentiate non-influenza respiratory pathogens (adenovirus, parainfluenza type 1-3, RSV, etc.). Additional duties include facilitating sample testing streams and database management between the virus isolation and molecular diagnostics laboratories.

### **B. Fringe Benefits - \$35,991**

The fringe benefit rate is 25.81% of salaries and wages for the above-listed positions, plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

### **C. Travel - \$3,563**

In State - \$1,000

Funding is requested for the influenza epidemiologist for in-state travel to visit sentinel sites and laboratories performing viral isolation.  
(1 FTE x 25 visits/2,222 miles x \$0.45per mile).

Out of State - \$2,563

Funding is requested for the influenza epidemiologist to attend a meeting related to surveillance at CDC. Date of meeting to be determined. Cost: \$1,303

1 trip x 1 epidemiologist x \$500 r/t airfare	\$500
Registration x 1 epidemiologists x \$150	\$150

3 nights and lodging by 1 epidemiologist x \$150/night	\$450
Ground transportation x 1 epidemiologist	\$150
3 days per diem x 1 epidemiologist x \$17.50/day	\$53

Funding is requested for one laboratory personnel to travel to the 24<sup>th</sup> Annual Clinical Virology Symposium in Daytona Beach, FL. This meeting is essential for integrating new technologies and virology laboratory testing updates into the public health laboratory. Cost: \$1,260

1 x \$340 r/t airfare	\$340
Registration x 1	\$300
3 nights lodging x \$150/night	\$450
Ground transportation x 1 trips	\$100
4 days per diem-1 persons x \$17.50	\$70

#### **D. Equipment - \$0**

#### **E. Supplies- \$36,150**

##### Conventional Influenza Testing Laboratory Supplies - \$8,000

Funding is requested to expand laboratory capacity during the influenza season, enhance its differential diagnostic capabilities, as well as to continue testing throughout the “inter-season”. Funding is needed for the materials, media, shell vials and reagents for culture, subtyping, and rapid testing for influenza and RSV. In addition, supplies are needed for testing to differentiate influenza from other respiratory pathogens with a similar clinical presentation (e.g. adenovirus, RSV, parainfluenza types 1-3)

Supplies necessary for testing include: Conventional Influenza Tissue Culture \$2,000 Rhesus monkey kidney (RMK) tubes, guinea pig red blood cells (RBCs), and turkey RBC for hemadsorption (HA) testing and other materials.

Rapid Influenza Testing \$5,000 -shell vials (RMK, MDCK), influenza A and B monoclonal antibodies and conjugate, and Directigen A and B kits.

Rapid RSV Testing \$1,000 -Directigen RSV kits

##### Molecular Influenza Testing Laboratory Supplies - \$24,900

Funding is requested for reagents and plasticware for carrying out influenza rRT-PCR testing on 1000 tests to include validation of approved CDC reagents on new extraction platforms. Additionally, reagents for rule-out of other influenza-like illness are also requested for high suspect specimens. In preparation for high throughput testing of influenza specimens, kits and supplies for our Roche MagNAPure and Qiagen BioRobot are requested. This would include test validation on the BioRobot and MagNAPure, as well as, sufficient validated reagent to have in-house in the event of an outbreak.

Primers/probes	\$5,000
Strains (viral and bacterial controls)	\$2,000
QIAmp RNA columns	\$2,500
RT. PCR kits	\$3,600
Disposables	\$400

Qiagen BioRobot kit	\$5,800
Qiagen BioRobot conductive tips	\$2,000
Roche MagNAPure kit and plasticware -	\$3,600

General Office Supplies - \$3,250

To support data collection, data processing, reporting of results, etc.. These include computer paper, computer diskettes, printer cartridges, paper, photocopy supplies, etc.

#### **F. Contractual- \$23,500**

Funding is requested for courier services to send collection kits to sites experiencing outbreaks or in need of immediate diagnostic services.

*Name of Contractor: Depending on location of specimen one of these 5*

*contractors will be utilized: Federal Express, Greenbelt MD*

*USA Couriers, Boston MA*

*Millers Express, No. Easton MA*

*Advantage Delivery Services, Rockland, MA*

*City Express, Boston MA*

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractors listed above have been awarded a Master Service Agreement and will be utilized for collection and transport of specimens.

*Period of Performance:* January 1, 2009 –December 31, 2009 (one year)

*Scope of work:* The contractor will pick up specimens from hospital or laboratories and deliver to the State Laboratory in a timely manner.

*Method of Accountability:* The laboratory supervisor will oversee the contractor.

*Budget:* \$3,500 estimated costs of 60 deliveries



Printing and Distribution \$20,000

Funding is requested for the cost of printing and distributing Influenza materials.

*Name of Contractor:* TBD Contractor will be chosen from list of contractors that provide printing and distribution services

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractor will be chosen from this list.

*Period of Performance:* January 1, 2009 – December 31, 2009 (one year)

*Scope of work:* Provide printing and distribution of educational materials.

*Method of Accountability:* Method of Accountability: The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables. The Health Education Coordinator will work closely with the contractor to ensure receipt of deliverables and that timelines are kept.

*Budget:* \$20,000

**G. Construction - \$0**

**H. Other - \$2,196**

Information Technology Support charge back: \$1,098 x 2 persons – A cost assessment has been determined for support of computer equipment/rental/internet access/ software support and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

**I. Total Direct Costs - \$240,133**

**J. Indirect Costs - \$21,087**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages.

**TOTAL: INFLUENZA SURVEILLANCE AND RESPONSE \$261,220**

Attachment 5: **NEDSS**

**NATIONAL ELECTRONIC DISEASE SURVEILLANCE SYSTEM (NEDSS)**

**A. Personnel - \$133,707**

NEDSS Lead – (1.0 FTE, 12 months) (Tropp) \$68,631  
Coordinates the development and implementation of the PHIN compliant web-based electronic disease surveillance system (MAEDSS). Serves as the principal programmatic contact for ongoing operations and contact with CDC.

NEDSS Project Manager - (1.0 FTE 12 months) (Barrus) \$65,076  
Oversees the technical implementation of the PHIN compliant web-based electronic disease surveillance system (MAEDSS). Serves as the principal technical contact for ongoing operations and contact with CDC.

**B. Fringe Benefits - \$34,694**

The fringe benefit rate is 25.81% of salaries and wages for the above-listed positions, plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

**C. Travel - \$10,598**

Out of State - \$10,598  
Travel to NEDSS coordinators conference – date and place to be determined  
3 persons - \$5,088  
Air - 3 person @ \$1,000 each, \$3,000  
Hotel – 3 rooms @ \$150 night x 3 nights \$1,350  
Meals - 3 persons x 4 days @\$17.50 per day \$210  
Ground transportation – 4 days \$528

Funding is requested for 5 day Orion rhapsody, NEDSS Broker Tool and PHIN-MS training course. 2 persons - \$5,510  
Air - 2 person @ \$500 each, \$1,000  
Hotel – 2 person @ \$150 night 5 nights \$1,500  
Meals - 2 persons x 6 days @\$17.50 per day \$210  
Ground transportation - 6 days \$300  
Training fees \$2,500

**D. Equipment - \$0**

**E. Supplies - \$5,500**

Funding is requested to purchase scanners, replacement printers, additional memory cards, hard drives, and other hardware to improve our development server for MAEDSS system (MAVEN) - \$3,000

Office Supplies \$2,500 Funding is requested for general office supplies to support program activities.

**F. Contractual - \$65,000**

Funding is requested to develop a de-identified module within MAEDSS in order to replace 3 antiquated legacy databases.

*Name of Contractor:* TEK Systems, Inc, Boston Ma.

*Method of Selection:* This contract was competitively procured in accordance with Massachusetts Law, 801 CMR 21.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* This contract will provide programming work to develop a new module within MAEDSS. Staff will include expertise in Oracle, JAVA and SQL Programming. Additional duties will also include facilitating compliance with all applicable ITD and DPH IT standards, and ensuring PHIN compliance.

*Method of Accountability:* The contractor will report to MDPH Bureau of Communicable Disease Control Director of Information Technology.

*Budget:* \$25,000

Funding is requested for the 24/7 phone messaging coverage to accept infectious disease reports.

*Name of Contractor:* Parkway Messaging Service

*Method of Selection:* Contractor was chosen after a competitive procurement in accordance with Massachusetts Law.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* Answer phones and receive and distribute messages pertaining to possible infectious diseases.

*Method of Accountability:* The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables.

*Budget:* \$10,000 (\$833 month)

Data Entry Services - \$30,000 Funding is requested for temporary data entry staff to assist with the entry of disease reports.

*Name of Contractor:* TBD

*Method of Selection:* Contractor will be chosen after a competitive procurement in accordance with Massachusetts Law.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* Answer phones and receive and distribute messages pertaining to possible infectious diseases.

*Method of Accountability:* The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables.

*Budget:* \$30,000

**G. Construction -\$0**

**H. Other - \$9,896**

Information Technology Support charge back: \$1,098 x 2 persons - \$2,196  
A cost assessment has been determined for support of computer equipment/rental/internet access/ software support and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment.

MDPH requests funds for the Orion Rhapsody annual service and maintenance license fees. MDPH is currently assessing the potential for its use in Massachusetts to support messaging between and to our public health information systems  
Orion Rhapsody annual service and maintenance license fees \$4,200.

MDPH requests funds to upgrade the MAEDSS (MAVEN) application development server. The current development server has insufficient resources for efficient development since the migration of the MAEDSS (MAVEN) application. The cost estimation is \$3,500.

**I. Total Direct Costs - \$259,395**

**J. Indirect Costs - \$20,323**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages.

**TOTAL: NEDSS - \$279,718**

**NATIONAL ELECTRONIC DISEASE SURVEILLANCE SYSTEM**

## **WEST NILE VIRUS**

### **A. Personnel - \$129,910**

Epidemiologist (1.0 FTE, 12 months) (Barrett)	\$54,475
Ms. Barret, Epidemiologist coordinates the WNV surveillance and health education program components in the Epidemiology Program. Ms. Barrett also functions as a primary liaison with the laboratory on epidemiology matters. Additionally, Ms. Barrett is responsible for coordinating and conducting epidemiologic investigations of suspect cases of human WNV, providing public education and outreach efforts relating to WNV and other medically important arboviruses will also be a function of the staff member.	
Laboratory Supervisor III (1.0 FTE, 12 months) (R. Konomi)	\$75,435
Responsible for supervising and carrying out all arboviral cell culture work for mosquito, horse and human specimens. This includes plaque reduction neutralization assays for anti-EEEV and anti-WNV and related flaviviruses. He is also responsible for technical supervision and QC/QA for arboviral serology assays and coordination with arboviral molecular testing.	

### **B. Fringe Benefits - \$33,714**

The fringe benefit rate is 25.81% of salaries and wages for the above-listed positions, plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

### **C. Travel - \$4,000**

In-State Travel - \$1,000

Funding is requested for in-state travel for field staff, specimen transport and to conduct regional trainings (2,222 miles @ \$0.45/mile = \$1,000).

Out-of-State Travel - \$3,000

Funding is requested for out-of-state travel for one laboratory representative and one epidemiological representative to attend annual WNV conference.

1 trip x 2 person x \$600 r/t airfare	\$1,200
3 nights lodging x 2 people x \$150/night	\$900
2 person ground transportation	\$195
Registration x 2 people	\$600
3 days per diem x 2 persons x \$17.50/day	\$105

### **D. Equipment - \$0**

### **E. Supplies - \$25,826**

Laboratory supplies - \$25,626

Reagents for arboviral molecular assays, including probes and primers (\$19,000); media and reagents for cell culture and serologic testing (\$4,626). Costs include plasticware (tubes, tips, plates, etc.) and laboratory safety supplies (gloves, sleeves, disposable coats, etc.), for molecular, serologic and culture testing. Field supplies such as traps, batteries, repellents, protective clothing, plastiware, bags, boxes and canisters are required for trapping and speciation (\$2,000)

General Office Supplies - \$200

Funding is requested for general office supplies to support activities for WNV staff.

**F. Contractual - \$5,000**

Funding is requested for the 24/7 (seasonal) phone messaging coverage for reporting of WNV activities including; dead birds and WNV/EEEV infection.

*Name of Contractor:* Parkway Messaging Service

*Method of Selection:* Contractor was chosen after a competitive procurement in accordance with Massachusetts Law.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* Answer phones and receive and distribute messages pertaining to possible infectious diseases.

*Method of Accountability:* The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables.

*Budget:* \$5,000

**G. Construction - \$0**

**H. Other - \$7,196**

Information Technology Support charge back: \$1,098 x 2 persons - \$2,196

A cost assessment has been determined for support of computer equipment/rental/internet access/ software support and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

Printing \$4,500

Funding is requested to print and distribute a limited supply of up to three new mosquito bite prevention posters created last year by regional technical school graphic arts students.

Translation \$500

Funding is requested to translate mosquito bite prevention posters in 4-5 languages.

**I. Total Direct Charges - \$205,646**

**J. Indirect Charges - \$19,746**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages

**TOTAL: WEST NILE VIRUS ACTIVITIES      \$225,392**

## Attachment 7: Epidemiology and Laboratory Capacity

### GENERAL EPIDEMIOLOGY AND LABORATORY CAPACITY

#### A. Personnel - \$193,159

General Epidemiologist (1.0 FTE, 12 months) (Cole) \$54,568

Ms. Cole will share responsibilities for all program objectives requiring epidemiology support. She will participate in activities related to antibiotic resistance, foodborne outbreak investigations, and NORS. She will also participate in all ELC educational activities.

Emerging Infection Epidemiologist (1.0 FTE, 12 months) (Glenn) \$67,483  
Ms. Glenn will share responsibilities for all program objectives requiring epidemiology support. She will also be specifically responsible for disease response activities related to surveillance for HUS, STEC, invasive meningococcal disease, CJD and *C. difficile*.

Epidemiology Morbidity & ELC Coordinator (1 FTE, 12 months)  
(Pringle) \$71,106

Ms. Pringle will share responsibilities for all program objectives requiring epidemiology support. She will also serve as the primary liaison with the laboratories on cooperative agreement matters. She will serve as the primary liaison with CDC and will have primary responsibility for ensuring all progress reports, cooperative agreement reapplications and other necessary documentation are submitted to CDC. She will also oversee all activities of ELC funded and in-kind funded epidemiologists.

#### B. Fringe Benefit - \$50,130

The fringe benefit rate is 25.81% of salaries and wages for the above-listed positions, plus Universal Health chargeback of \$17/person/year and payroll chargeback of \$75/person/year.

#### C. Travel - \$13,500

In State - \$13,500

In-state travel is required for epidemiology and laboratory staff to visit boards of health, private practices, clinics, regional offices, local and state agencies and hospitals to provide in-service training and follow-up to implement and monitor grant guidelines and objectives and solicit participation in active surveillance activities.

Epidemiology and laboratory staff to travel approximately 30,000 miles x \$0.45=\$13,500

#### D. Equipment - \$0

#### **E. Supplies - \$20,000**

General Office Supplies - \$20,000

Funding is requested for the purchase of project related general office supplies, educational supplies and general office equipment to support laboratory and epidemiologists staff activities.

#### **F. Contractual \$89,120**

Translation Services - \$5,000

*Name of Contractor:* TBD

*Method of Selection:* Massachusetts maintains an existing list of master service agreements (MSA) that have been competitively procured in accordance with Massachusetts Law. The contractor will be chosen from this list.

*Period of Performance:* January 1, 2009 – December 31, 2009 (one year)

*Scope of work:* Translation of program related educational materials.

*Method of Accountability:* Method of Accountability: The Contractor will sign a Commonwealth of Massachusetts Standard Terms and Conditions document that allows the Division to monitor and enforce strict contract conditions. In addition, the contractor will be required to follow a timeline with payment only upon receipt of deliverables. The ELC Health Education Coordinator will work closely with the contractor to ensure receipt of deliverables and that timelines are kept.

*Budget:* \$5,000 for translation of program-related educational materials distributed to foodhandlers, school personnel, LHDs, laboratorians, general public, and other audiences as appropriate to support audiences where English is not the first language. Spanish and Portuguese are prioritized first, followed by Vietnamese, Chinese and Haitian Creole (19 documents).

♦

Funding is requested for the development of interfacing between the MDPH LIS and the MDPH Communicable Disease web-based surveillance system and the CDC

*Name of Contractor:* DiagnosisONE, Boston MA

*Method of Selection:* This contract was competitively procured in accordance with Massachusetts Law, 801 CMR 21.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:*

- Enhance the MDPH Electronic Laboratory Reporting System (ELR) to receive Influenza and Pertussis results, send provider profile creations and updates to support extraction by multiple MDPH clients.
- Enhance the MDPH ELR web service to handle electronic results and provider profiles.
- Create and customize event triggers, transformation, and transmission of results data received between the MDPH LIS and ELR.

*Method of Accountability:* The contractor will report to MA State Laboratory Director of Laboratory Information Systems.

Budget: \$30,000



Funding is requested to upgrade MDPH LIS component used by the Microbiology Laboratory to test and report Pertussis test results.

Name of Contractor: VT Regina & Associates, Boston MA

Method of Selection: This contract was competitively procured in accordance with Massachusetts Law, 801 CMR 21.

Period of Performance: January 1, 2009 – December 31, 2009

Scope of work: This contract will provide project management assistance and technical services required for the deployment of the LIS for the MDPH Microbiology Laboratory that performs Pertussis testing. The customizations include integration testing and reporting processes, instrument interfacing, rapid order entry and remote order entry and HL7 reporting. Services also include user training, deployment planning, requirements analysis and implementation support for the enhanced LIS, HL7 messaging, remote order entry and reporting components.

Method of Accountability: The contractor will report to MA State Laboratory Director of Laboratory Information Systems.

Budget: \$19,120



Funding is requested for programming support to augment the existing full time staff for the Upgrade Microbiology LIS component used by the Microbiology Laboratory to test and report Pertussis results. The existing LIS is a FoxPro DOS based system that was developed in 1982.

Name of Contractor: TEK Systems, Inc, Boston Ma.

Method of Selection: This contract was competitively procured in accordance with Massachusetts Law, 801 CMR 21.

Period of Performance: January 1, 2009 – December 31, 2009

Scope of work: This contract will provide programming support needed for the development of the MDPH LIS component used by the Microbiology Laboratory development. Staffing will include expertise in VB, VB.NET and ASP.Net. Additional duties will also include facilitating compliance with all applicable ITD and DPH IT standards, developing system specifications to comply with the *PHIN Connecting Laboratory Systems Functional Requirements* and providing support for LIMS development, test and production environments.

Method of Accountability: The contractor will report to MA State Laboratory Director of Laboratory Information Systems.

Budget: \$10,000



Funding is requested for development of rapid entry data system.

*Name of Contractor:* To be determined after a competitive bidding process.

*Method of Selection:* This contract will be competitively procured in accordance with Massachusetts Law, 801 CMR 21.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* Develop a system to allow rapid entry of data either through direct access by local boards of health or electronic data feed utilizing Teleform by 9/1/2009. Develop and implement a de-identified module in MDPH's PHIN-compliant system that will allow the capture of aggregate morbidity and mortality data for influenza by 09/31/2009.

*Method of Accountability:* The contractor will report to MA State Laboratory Director of Laboratory Information Systems.

*Budget:* \$15,000

♦

Funding is requested for improvement of pediatric death surveillance.

*Name of Contractor:* To be determined after a competitive bidding process.

*Method of Selection:* This contract will be competitively procured in accordance with Massachusetts Law, 801 CMR 21.

*Period of Performance:* January 1, 2009 – December 31, 2009

*Scope of work:* develop and implement an extract and electronic feed from MDPH's PHIN compliant web- based disease surveillance system to report pediatric deaths through NNDSS by 11/01/2009

*Method of Accountability:* The contractor will report to MA State Laboratory Director of Laboratory Information Systems.

*Budget:* \$10,000

#### **G. Construction - \$0**

#### **H. Other – \$33,294**

Information Technology Support charge back – \$3,294 (\$1,098 x 3 persons)

A cost assessment has been determined for support of computer equipment/rental/internet access/ software support and technical support for each staff computer and dedicated laboratory computer equipment. The cost of each computer support is \$1,098 per staff or dedicated laboratory equipment. This cost is in lieu of computer equipment request.

Postage to support all activities - \$20,000

In addition to routine programmatic activities, the MDPH Bureau of Communicable Disease Control maintains a centralized inventory system where order forms from around the state for education and training materials are received and processed.

Printing - \$10,000 Funding is requested for the printing of the MA *Guide to Surveillance, Reporting and Control* reference manual, a key resource for local health departments, infection control practitioners, school nurses and other audiences. Since its development, the manual remains in high demand. Funding is also requested to support the ELC-related classroom and web-based trainings now offered: training packets (\$4,000), copying or printing (\$3,000); and general printing needs for other training program needs (\$3,000).

**I. Total Direct Costs - \$399,201**

**J. Indirect Costs - \$29,360**

Indirect charges are based upon the current Department of Health and Human Services and Commonwealth of Massachusetts negotiated indirect cost rate of 15.2% of salaries and wages.

**TOTAL:**

**General Epidemiology and Laboratory Capacity \$428,561**